

Fixed Automated Spray Technology August 19 2011 Introduction

Lists citations with abstracts for aerospace related reports obtained from world wide sources and announces documents that have recently been entered into the NASA Scientific and Technical Information Database.

Annotation A handbook for chemical and process engineers who need a solution to their practical on-the-job problems. It solves process design problems quickly, accurately and safely, with hundreds of techniques, shortcuts and calculations. The first and only comprehensive guide to best practices in winter road operations Winter maintenance operations are essential to ensure the safety, mobility, and productivity of transportation systems, especially in cold-weather climates, and responsible agencies are continually challenged to provide a high level of service in a fiscally and environmentally responsible manner. Sustainable Winter Road Operations bridges the knowledge gaps, providing the first up-to-date, authoritative, single-source overview and guide to best practices in winter road operations that considers the triple bottom line of sustainability. With contributions from experts in the field from around the world, this book takes a holistic approach to the subject. The authors address the many negative impacts on regional economies and the environment of poorly planned and inadequate winter road operations, and they make a strong case for the myriad benefits of environmentally sustainable concepts and practices. Best practice applications of materials, processes, equipment, and associated technologies and how they can improve the effectiveness and efficiency of winter operations, optimize materials usage, and minimize cost, corrosion, and environmental impacts are all covered in depth. Provides the first up-to-date, authoritative and comprehensive overview of best practices in sustainable winter road operations currently in use around the world Covers materials, processes, equipment, and associated technologies for sustainable winter road operations Brings together contributions by an international all-star team of experts with extensive experience in designing, implementing, and managing sustainable winter road operations Designed to bring professionals involved in transportation and highway maintenance and control up to speed with current best practice Sustainable Winter Road Operations is essential reading for maintenance professionals dealing with snow and ice control operations on highways, motorways and local roads. It is a valuable source of information and guidance for decision makers, researchers, and engineers in transportation engineering involved in transportation and highway maintenance. And it is an ideal textbook for advanced-level courses in transportation engineering.

"TRB's National Cooperative Highway Research Program (NCHRP) Synthesis 449 : Strategies to Mitigate the Impacts of Chloride Roadway Deicers on the Natural Environment documents the range of methods, tools, and techniques used by transportation agencies to minimize the environmental impact of chloride-based roadway deicers"--Publisher's description.

The Arizona Department of Transportation's (ADOT's) SPR-570: Rural ITS Progress Study - Arizona 2004 provided 20 key recommendations for improved utilization of the rural Intelligent Transportation Systems (ITS) infrastructure. Two years later, in reviewing the outcomes of the 2004 study and the ongoing rural technology deployments, the Department identified several of the key concerns as still being unresolved. In general, ADOT has been successful in implementing the recommendations of the 2004 statewide review, but five areas of unmet needs or unfulfilled potential remain. These five gap areas are the primary focus of this new research project, to fully implement the potential of all of the recommendations from the 2004 study. The five primary focus areas are: ITS maintenance, weather information systems, highway advisory radio, motorist assist patrols, and information sharing. The research team interviewed the project's stakeholders from Arizona's rural districts to identify recent changes in their ITS deployment, goals, and visions for future deployment, as well as current needs and desires since the previous 2004 study. The investigators also reviewed the current practices and concepts of rural ITS among other transportation agencies throughout the country. This included conducting personal interviews with recognized industry leaders, attending industry conferences, and performing extensive research in literature, products (both off-the-shelf and in-development), and on-line. Based on the interviews and state-of-the-practice research components, the investigators developed a list of ITS concepts that might service the rural needs of the Department. Each of the five focus areas contains several concepts that address needs identified as original project goals, or new topics identified during the field interviews. Each discussion section provides a conceptual approach and application of ITS technology or state-of-the-practice development, a breakdown of benefits and challenges for implementation, implementation recommendations and a breakdown of the engineer's opinion of cost. Each concept has been ranked by the project advisory group based on implementation priority. A potential process owner and potential resources for deployment are also identified.

The papers in this volume comprise the refereed proceedings of the First International Conference on Computer and Computing Technologies in Agriculture (CCTA 2007), in Wuyishan, China, 2007. This conference is organized by China Agricultural University, Chinese Society of Agricultural Engineering and the Beijing Society for Information Technology in Agriculture. The purpose of this conference is to facilitate the communication and cooperation between institutions and researchers on theories, methods and implementation of computer science and information technology. By researching information technology development and the - sources integration in rural areas in China, an innovative and effective approach is expected to be explored to promote the technology application to the development of modern agriculture and contribute to the construction of new countryside. The rapid development of information technology has induced substantial changes and impact on the development of China's rural areas. Western thoughts have exerted great impact on studies of Chinese information technology development and it helps more Chinese and western scholars to expand their studies in this academic and application area. Thus, this conference, with works by many prominent scholars, has covered computer science and technology and information development in China's rural areas; and probed into all the important issues and the newest research topics, such as Agricultural Decision Support System and Expert System, GIS,

GPS, RS and Precision Farming, CT applications in Rural Area, Agricultural System Simulation, Evolutionary Computing, etc.

Sustainable Winter Road Operations John Wiley & Sons

The purpose of this manual is to provide clear and helpful information for maintaining gravel roads. Very little technical help is available to small agencies that are responsible for managing these roads. Gravel road maintenance has traditionally been "more of an art than a science" and very few formal standards exist. This manual contains guidelines to help answer the questions that arise concerning gravel road maintenance such as: What is enough surface crown? What is too much? What causes corrugation? The information is as nontechnical as possible without sacrificing clear guidelines and instructions on how to do the job right.

[Copyright: d36e35ed48b54b5b587c6ff7789e4b39](#)